

REMARKS/ARGUMENTS

The Office Action dated March 7, 2006, has been carefully reviewed.

The Examiner maintains that the effective filing date of the claims is August 1, 1995.

Claims 19 and 37 stand rejected as allegedly obvious double patenting of claims 37 – 58 of U.S. Patent No. 5,334,640.

Claims 19 stands rejected under 35 U.S.C. § 102 (b and e) as allegedly anticipated by Nisshinbo Industries Inc. EP 0 555 980, Sumino et al. 4,791,061, or Kobayashi et al. U.S. 5,268,286.

Claims 37 stands rejected under 35 U.S.C. § 102(b and e) as allegedly anticipated by Nisshinbo Industries Inc. EP 0 555 980, Sumino et al. 4,791,061, Feijen, US 5,041,292 or Kobayashi et al. U.S. 5,268,286.

Also, Claims 19 and 37 stand rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Desai, et al. (U.S. 5,550,178), Soon-Shiong, et al. (U.S. 5,705,270), Soon-Shiong, et al. (U.S. 5,700,848), Gunther, et al. (U.S. 5,736,595), Soon-Shiong, et al. (U.S. 5,837,747), Soon-Shiong, et al. (U.S. 5,846,530), or Mathiowitz, et al. (U.S. 5,985,354).

Applicants have amended claims 19 and 37 in order to claim more distinctly the subject matter of the invention. The claims are fully supported by the Application as filed.

Reconsideration of this Application is respectfully requested in view of the foregoing amendments and additional remarks, which have addressed all the grounds for rejection or have rendered them moot.

Earliest priority support for amended Claims 19 and 37 is February 28, 1992

The patentability of claims 19 and 37 turn on what is deemed their earliest priority date. Applicants contend that the amended claims have a priority date of at least February 28, 1992. Applicants have amended Claims 19 and 37 to recite specific chemicals found on page 27, lines 3-4 in the Priority Document, Application Number 07/843,485 with a filing date of February 28, 1992. Support can be found in the chain of applications from the '485 application to the instant application (Patent 5,410,016 – column 8, lines 45-47; Patent 5,626,863 – column 8, lines 14-16, Application 08/510,089 – page 35, lines 20-21, and Application 10/753,687 – page 7, paragraph [102]).

Double-Patenting Rejection

Claims 19 and 37 stand rejected as allegedly unobvious double patenting of claims 37 – 58 of U.S. Patent No. 5,334,640. Applicants disagree.

The earliest priority date of the 5,334,640 patent is April 08, 1992. Applicants respectively ask that this ground for rejection be withdrawn.

Rejection under 35 U.S.C. § 102 (b)

Claims 19 and 37 stand rejected under 35 U.S.C. §102(b) as being anticipated by Nisshinbo Industries Inc. EP 0 555 980, Sumino et al. 4,791,061, Feijen, US 5,041,292 or Kobayashi et al. U.S. 5,268,286. Applicants respectfully traverse.

In order for a reference to be a proper 35 U.S.C. §102(b) prior art reference, the invention must have been “patented or described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent.” The Nisshinbo reference was first published on August 18, 1993 and was patented on October 23, 1996. The instant application has an effective filing date, at the latest, of February 28, 1992, which pre-dates the Nisshinbo reference. Therefore, the Nisshinbo reference is not prior art and cannot anticipate the instant application.

Also, the Sumino et al. 4,791,061 reference does not teach the use of a macromers of the sort described above and exemplified by Figures 1A- 1J. The use of acrylamide and alginic acid monomers to carry out microbial entrapment is patentably distinct from the use of macromers having covalently and ionically crosslinkable components.

Likewise, Feijen et al. teaches a biodegradable hydrogel matrix useful for the controlled release of pharmacologically active agents formed by cross-linking a proteinaceous component and a polysaccharide or mucopolysaccharide, and then loading a selected drug therein.

Again, Feijen does not teach a macromer having a covalently crosslinkable and an ionically crosslinkable component. There is no basis for anticipation in this case and Applicants ask that this ground for rejection be withdrawn as well.

Likewise, Kobayashi teaches a biocatalyst immobilized with a graft product of a polymer and saponified polyvinyl acetate containing a stilbazolium group as a photo-crosslinking group. The polymer is preferably gelatin, collagen, starch, cellulose, gum arabic, tragacanth gum,

carrageenan, mannan, dextrin or alginic acid. The graft product is prepared by bonding the polymer to the polyvinyl acetate, either directly through functional groups of the polymer and polyvinyl acetate or through a crosslinking agent.

Kobayashi does not teach a macromer having both an ionically and a covalently crosslinkable component. For that at least, there is no basis for anticipation and Applicants ask that this ground for rejection be withdrawn as well.

Rejection under 35 U.S.C. § 102(e)

Claims 19 and 37 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Desai, et al. (U.S. 5,550,178), Soon-Shiong, et al. (U.S. 5,705,270), Soon-Shiong, et al. (U.S. 5,700,848), Gunther, et al. (U.S. 5,736,595), Soon-Shiong, et al. (U.S. 5,837,747), Soon-Shiong, et al. (U.S. 5,846,530), or Mathiowitz, et al. (U.S. 5,985,354). Applicants respectfully traverse.

The references cited by the Examiner are all patents and therefore fall under 35 U.S.C. §102(e)(2). In order for a reference to be a proper 35 U.S.C. §102(e)(2) prior art reference, the invention must have been described in . . . “a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language. However, references based on international applications that were filed prior to November 29, 2000 are subject to the former (pre-AIPA) version of 35 U.S.C. §102(e) as set forth below. MPEP §706.02(a).

Former 35 U.S.C. §102 (e): “A person shall be entitled to a patent unless . . . the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.” See MPEP §706.02(a).

Patents issued directly, or indirectly, from international applications filed before November 29, 2000, may only be used as prior art based on the provisions of 35 U.S.C. 102(e) in effect before November 29, 2000. Thus, the 35 U.S.C. 102(e) date of such a prior art patent is

the earliest of the date of compliance with 35 U.S.C. 371 (c)(1), (2) and (4), or the filing date of the later-filed U.S. continuing application that claimed the benefit of the international application. MPEP §706.02(a). International applications, which were filed prior to November 29, 2000, may not be used to reach back (bridge) to an earlier filing date through a priority benefit claim for prior art purposes under 35 U.S.C. §102(e). MPEP §706.02(a).

Soon-Shiong, et al. Patent

Since the four Soon-Shiong, et al. patents (U.S. 5,700,848; 5,705,270; 5,837,747; 5,846,530) issued directly, or indirectly, from an international application (PCT/US92/09364; filed October 29, 1992) filed before November 29, 2000, the pre-AIPA 35 U.S.C. §102(e) applies. As such, the earliest effective filing dates for the three Soon-Shiong patents listed above would be October 29, 1992 based on the 35 U.S.C. §371 compliance date. Although the international application claims priority to a CIP application (U.S. application 07/784,267; filed October 29, 1991), the four above-listed patents cannot use the international application to bridge the gap. MPEP 706.02(a). Since the instant application has an effective filing date, at the latest, of February 28, 1992, which is prior to the four Soon-Shiong, et al. patents' effective filing date, they are not prior art and therefore cannot anticipate the instant application.

Gunther, et al. Patent

With respect to the Gunther, et al. patent (U.S. 5,736,595), it would be treated the same way as the Soon-Shiong patents because it is a patent based on an international application filed before November 29, 2000. Since, the pre-AIPA 35 U.S.C. §102(e) would apply, the effective filing date for the patent would either be the filing date in the United States or when the 35 U.S.C. §371 requirements were met. The Gunther, et al. patent has a 35 U.S.C. §371 date of November 3, 1995, which is also the 35 U.S.C. §102(e) date, which is after the effective filing date for the instant application. Therefore, the Gunther, et al. patent is not prior art and thus, cannot anticipate the instant application.

Desai, et al. Patents and Mathiowitz, et al. Patent

With respect to the Desai, et al patents (5,550,178) and Mathiowitz, et al. patent (U.S. 5,985,354), the proper 35 U.S.C. §102(e) to use would be the current statute. Thus, the effective

date for the Desai, et al. patents is April 8, 1992 (the application filing date and earliest claim to priority) and the effective date for the Mathiowitz, et al. patent is June 7, 1995 (the application filing date). Since both effective filing dates for 35 U.S.C. §102(e) purposes are after the effective filing date of the instant application, the three patents are not prior art. Therefore, the three patents cannot anticipate the instant application.

Applicants respectfully request reconsideration and withdrawal of this ground of rejection because the cited patents are not prior art and thus, cannot and do not anticipate the instant application.

Conclusion

This Response to a previous Final Rejection is filed with a Request for Continued Examination (RCE) and a request for a 3-month extension. However, please charge any additional fees, including any fees for additional extension of time, or credit overpayment to credit card.

The claims have been amended to claim more precisely the disclosed invention. No new matter has been added by the amendments to the claims.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office action and, as such, the present application is in condition for allowance. Applicants wish to expedite the prosecution process and if the Examiner believes, for any reason that personal communication will help expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Response is respectfully requested.

Respectfully submitted,

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